Quadratic Functions Study Guide

1.) Graph 

|  |  |
| --- | --- |
| A.O.S. \_\_\_\_\_\_\_\_ Min or Max: \_\_\_\_\_\_\_ Y-Value: \_\_\_\_\_\_\_ Vertex: \_\_\_\_\_\_\_\_\_\_Scale Factor: \_\_\_\_\_\_\_\_\_\_\_\_\_Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

2.  3.

Axis of Symmetry: Axis of Symmetry:

Vertex: Vertex:

Solutions: Solutions:

**Find the roots of each expression by using the Quadratic Formula**

**4.** y2 + 15y – 100 = 0 5. x2 – 16 = 0

**Factor each expression. SHOW ALL WORK!!!!**

6.) $14a^{3}b^{2} + 21a^{2}b - 35ab^{3}$ 7.)$48 - 12y + 4x - xy$

8.)$5x^{2}+7x- 6$ 9.)$8x^{2} + 28x + 12$

Factor by Completing the Square

10.)  11.) 